

Claims

[c1] What is claimed is:

1.A flameless tracer/marker for an ammunition housing a multitude of projectiles utilizing chemlucent chemicals, comprising:

a light-emitting chemical carried by the projectile for emitting light visible to an observer during a flight of the projectile.

[c2] 2.The tracer/marker of claim 1, wherein the light-emitting chemical comprises a mixture of a first chemlucent chemical and a second chemlucent chemical.

[c3] 3.The tracer/marker of claim 2, wherein the light-emitting chemical is created when the first chemlucent chemical and the second chemlucent chemical combine during flight of the ammunition.

[c4] 4.The tracer/marker of claim 3, wherein the light-emitting chemical emits light visible to an observer during flight of the projectile.

[c5] 5.The tracer/marker of claim 1, wherein the light-emitting chemical comprises a chemlucent chemical to mark the target upon impact by the projectile with light

visible to the observer.

- [c6] 6.The tracer/marker of claim 1, wherein the first chem-lucent chemical is contained in a separate bag within the ammunition.
- [c7] 7.The tracer/marker of claim 1, wherein the second chemlucent chemical is contained in a separate bag within the ammunition.
- [c8] 8.The tracer/marker of claim 6, wherein the projectiles are coated in the second chemlucent chemical and allowed to dry.
- [c9] 9.The tracer/marker of claim 8, wherein the projectiles puncture the separate bag during launch, mixing the first chemlucent chemical and the second chemlucent chemical to create the light-emitting chemical.
- [c10] 10.The tracer/marker of claim 9, wherein the second chemlucent chemical in powdered form is loaded in the ammunition with the projectiles.
- [c11] 11.The tracer/marker of claim 10, wherein the second chemlucent chemical in powdered form mixes with the first chemlucent chemical to create the light-emitting chemical.
- [c12] 12.The tracer/marker of claim 11, wherein the first

chemlucent chemical and the second chemlucent chemical are contained in separate bags within the ammunition.

- [c13] 13.The tracer/marker of claim 12, wherein the projectiles puncture the separate bags during the launch of the ammunition, mixing the first chemlucent chemical and the second chemlucent chemical, creating the light-emitting chemical.
- [c14] 14.The tracer/marker of claim 1, wherein the first chemlucent chemical is contained in a plurality of glass vials.
- [c15] 15.The tracer/marker of claim 14, wherein the glass vials are restrained by a spider.
- [c16] 16.The tracer/marker of claim 15, wherein the glass vials are placed in a bag.
- [c17] 17.The tracer/marker of claim 16, wherein the second chemlucent chemical in powdered form is placed in the bag with the glass vials.
- [c18] 18.The tracer/marker of claim 17, wherein the bag is placed in the ammunition.
- [c19] 19.The tracer/marker of claim 15, wherein the first and second chemlucent chemicals are contained in some of the glass vials.

- [c20] 20.The tracer/marker of claim 19, wherein the glass vials break during gun launch of the projectile, mixing the first and second chemlucent chemicals.
- [c21] 21.The tracer/marker of claim 19, wherein the projectiles puncture the bag, mixing the first and second chemlucent chemicals.
- [c22] 22.The tracer/marker of claim 1, wherein the projectile is made at least in part, of a transparent material wherein the light-emitting chemical traces a ammunition path in addition to marking the target.
- [c23] 23.The tracer/marker of claim 19, wherein the projectile is made of an opaque material, wherein no light is seen of the projectile flight to the target but only a light is detected on the target after ammunition impact with the target.